

PROJECT ADMINISTRATION DATA SHEET

ORIGINAL



REVISION NO. _____

Project No. A-3289DATE 7/13/82Project Director: W. A. HendrixSchool/Lab TALSponsor: Office of Planning and Budget/Office of Energy Resources; Atlanta, GAType Agreement: Unnumbered contract dated 6/7/82Award Period: From 7/1/82 To 6/30/83 (Performance) _____ (Reports) _____Sponsor Amount: \$400,000 Contracted through: _____Cost Sharing: N/A GTRI/OTF _____Title: Industrial Energy Extension Service (FY83)ADMINISTRATIVE DATAOCA Contact Leamon R. Scott

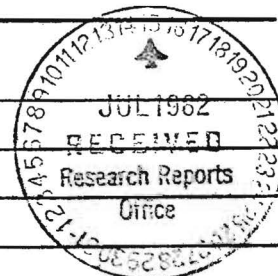
1) Sponsor Technical Contact:

Mr. Phil WhitlowGeorgia Office of Energy Resources270 Washington St., S.W.Atlanta, GA 30334

2) Sponsor Admin/Contractual Matters:

sameDefense Priority Rating: N/ASecurity Classification: N/ARESTRICTIONSSee Attached DOE Supplemental Information Sheet for Additional Requirements.

Travel: Foreign travel must have prior approval - Contact OCA in each case. Domestic travel requires sponsor approval where total will exceed greater of \$500 or 125% of approved proposal budget category.

Equipment: Title vests with none proposedCOMMENTS:COPIES TO:Administrative Coordinator
Research Property Management
Accounting
Procurement/EES Supply Services
FORM OCA 4-781Research Security Services
Reports Coordinator (OCA) ✓
Legal Services (OCA)
LibraryEES Public Relations (2)
Computer Input
Project File
Other GTRI

SPONSORED PROJECT TERMINATION SHEET

Date September 20, 1983

Project Title: Industrial Energy Extension Service (FY83)

Project No: A-3289 (Subproject is E-19-665/ChE)

Project Director: W.A. Hendrix

Sponsor: Office of Planning and Budget/ Office of Energy Resources

Effective Termination Date: 6/30/83

Clearance of Accounting Charges: 6/30/83

Grant/Contract Closeout Actions Remaining:

- ☒ Final Invoice ~~and Closing Documents~~
- ☐ Final Fiscal Report
- ☐ Final Report of Inventions
- ☐ Govt. Property Inventory & Related Certificate
- ☐ Classified Material Certificate
- ☐ Other _____

Assigned to: TAL ~~XXXXXXXXXXXX~~ (School Laboratory)

COPIES TO:

~~Administrative Coordinator~~
 Research Property Management
 Accounting
 Procurement Supply Services

Research Security Services
Reports Coordinator (OCA)
 Legal Services (OCA)
 Library

EES Public Relations (2)
 Computer Input
 Project File
 Other Hendrix
 GTRI



ENGINEERING EXPERIMENT STATION
Georgia Institute of Technology
A Unit of the University System of Georgia
Atlanta, Georgia 30332

October 14, 1982

Mr. Phil Whitlow
Georgia Office of Energy Resources
Trinity-Washington Building
270 Washington Street
Atlanta, Georgia 30334

Subject: Industrial Energy Extension Service Program Quarterly Progress
Summary Report for EES/GIT Research Project A3289 for Period
July 1, 1982 to September 30, 1982.

Dear Mr. Whitlow:

This summarizes activities on Research Project A3289, for the Third Quarter, 1982. This quarter marks the beginning of the 1982-1983 Program Year.

Quarterly Goals

1. Continue energy audit and technical assistance program for industry.
2. Develop and document case studies and special reports on specific technology areas as scheduled.
3. Print and mail third quarter issue of the Conserver.
4. Continue work on computer programs for use in evaluating industrial energy conservation measures.
5. Finish printing of revised Energy Tips.
6. Begin arrangements for Electrical Energy Management workshop in Savannah on October 20, and Waste Heat Recovery workshop in Macon on November 10.
7. Continue program promotion, follow-up, and evaluation.
8. Begin work on updated IEES slide show presentation for use in promotion.

Mr. Phil Whitlow
October 14, 1982
Page Two

Quarterly Activities

1. Statistics for in-plant activity:

	<u>Quarter</u>	<u>1982-83 Cumulative</u>	<u>1982-83 Program Goals</u>
Total Industry Contacts:	59	59	N/A
New Industry Contacts:	34	34	100
Plant Visits:	18	18	N/A
New Audit/TA Plants:	16	16	60
Unsolicited Requests:	11	11	N/A
Reports Sent:	18	18	N/A
Case Studies:	1	1	16
Completed TA's*:	2	2	
Completed Audits:	15} 17	15} 17	60

*In-plant activity in a specific energy conservation area which culminates in a written report to company management.

2. Published Conserver using new masthead, colors, and layout. The third quarter issue of the Conserver was mailed to 5,800 business and industry representatives as well as 40 copies to EES extension offices. A copy is attached.
3. Continued efforts to improve maintenance of mailing list.
4. The following special reports have been printed. Copies of each are attached.
 - a. Improving Industrial Dryer Efficiency
 - b. Energy Efficiency in Process Heating Systems
5. Electrical Energy Management workshop will be promoted and co-sponsored by Savannah Electric and Power Company.
6. Energy Tips 1 through 30 have been printed, and are ready for use.

Mr. Phil Whitlow
October 14, 1982
Page Three

Milestones Met During the Quarter

1. Evaluated results of IEES program through the third quarter of 1982 (see attachment). Estimated program energy savings by Georgia industries for the second quarter of 1982 was:

$$335.65 \times 10^9 \text{ BTU/yr}$$

This gives a cumulative total programsavings in excess of
 $92.2 \times 10^{12} \text{ BTU/yr}$

for a cost savings of \$295.2 million/year. The energy savings goal for the 1982-83 program year is

$$8.0 \times 10^{12} \text{ BTU/yr}$$

The cumulative program energy savings goal by the end of 1983 is

$$99.6 \times 10^{12} \text{ BTU/yr}$$

2. Completed 15 audits, two TA's, and one case study.

Respectfully submitted,

Hank Jackson
Project Director

mro

Attachments

TABLE 1 -- IEES ENERGY SAVINGS ESTIMATE
7/1/82 - 9/30/82 (Third Quarter 1982)

Actual Annual Savings (10^9 BTU's)

<u>Industry Group</u>	<u>Audits</u>	<u>Workshops</u>	<u>Total</u>
General*	135.65	-	135.65
Textiles	200.00	-	200.00
Chemical	0.0	-	0.0
Stone, Clay & Glass	<u>0.0</u>	<u>-</u>	<u>0.0</u>
TOTALS	335.65	-	335.65

* General industry sector now includes food and kindred products.

TABLE 2 -- IEES ENERGY SAVINGS ESTIMATE

8/1/77 to 9/30/82

Actual Annual Savings (10^9 BTU's)

<u>Industry Group</u>	<u>Estimate through 2nd Quarter 1982¹</u>	<u>Estimate for 3rd Quarter 1982²</u>	<u>Cumulative Estimate through 3rd Quarter 1982</u>
General ³	19,194.53	135.65	19,330.18
Textiles	17,957.20	200.00	18,157.20
Chemical :	29,669.54	0.0	29,669.54
Stone, Clay & Glass	<u>25,037.23</u>	<u>0.0</u>	<u>25,037.23</u>
TOTALS	91,858.50	335.65	92,194.15

¹ Reported in July memorandum from G. Thomas to W.A. Hendrix.

² Shown in Table 1 of this report.

³ General industry group now includes food and kindred products.

STATE OF GEORGIA
INDUSTRIAL ENERGY EXTENSION SERVICE
Program Highlights 8/1/77 - 9/30/82

● Total Industry Contacts	1384
● Plant Visits	686
● Audits Completed*	296
● Workshops Conducted	54
● Total Workshop Attendees	1795
● Estimated Actual Energy Savings by Georgia Industry During Program Existence	92.19 trillion BTU's
● Estimated Actual Energy Cost Savings by Georgia Industry During Program Existence	\$295.2 million

* Includes in-plant technical assistance activity which is defined as work in a specific energy conservation area which culminates in a written report to company management.



ENGINEERING EXPERIMENT STATION
Georgia Institute of Technology
A Unit of the University System of Georgia
Atlanta, Georgia 30332

January 17, 1983

Mr. Phil Whitlow
Georgia Office of Energy Resources
Trinity-Washington Building
270 Washington Street
Atlanta, Georgia 30334

Subject: Industrial Energy Extension Service Program Quarterly Progress
Summary Report for EES/GIT Research Project A3289 for Period
October 1, 1982 to December 31, 1982.

Dear Mr. Whitlow:

This summarizes activities on Research Project A3289, for the Fourth
Quarter, 1982.

Quarterly Goals

1. Continue energy audit and technical assistance program for industry.
2. Develop and document case studies and special reports on specific technology areas as scheduled.
3. Print and mail fourth quarter issue of the Conserver.
4. Conduct Electrical Energy Management Workshop in Savannah, and Waste Heat Recovery Workshop in Macon.
5. Continue program promotion, follow-up, and evaluation.
6. Complete IEES slide show for use in promotions.

Quarterly Activities

1. Statistics for in-plant activity:

	<u>Quarter</u>	<u>1982-83 Cumulative</u>	<u>1982-83 Program Goals</u>
Total Industry Contacts:	47	106	N/A
New Industry Contacts:	33	67	100
Plant Visits	11	29	N/A
New Audit/TA Plants:	8	24	60
Unsolicited Requests:	4	15	N/A
Reports Sent:	4	22	N/A
Case Studies:	0	1	16
Completed TA's*:	1	3	60
Completed Audits:	4	19	

* In-plant activity in a specific energy conservation area which culminates in a written report to company management.

2. The fourth quarter issue of the Conserver was mailed to 5,800 business and industry representatives as well to EES extension offices. A copy is attached.
3. Presented Electrical Energy Management Workshop in Savannah on October 20, with SEPCO as co-sponsor.
4. Presented Waste Heat Recovery Workshop in Macon on November 10. Macon-Bibb County Clean Community and Energy Commission co-sponsored.
5. Completed work on IEES slide show, and performed trial-run for EES Industrial Extension Division area office personnel at planning meeting on November 5.
6. Began work on two technical briefing reports.

Mr. Phil Whitlow
January 17, 1983
Page Three

Milestones Met During the Quarter

1. Evaluated results of IEES program through the fourth quarter of 1982 (see attachments), including two workshops. Estimated program energy savings by Georgia industries for the fourth quarter of 1982 was:

$$1.3 \times 10^{12} \text{ BTU/yr}$$

This gives a cumulative total program savings in excess of

$$93.5 \times 10^{12} \text{ BTU/yr}$$

for a cost savings of \$310.1 million/year. The energy savings goal for this year was

$$8.0 \times 10^{12} \text{ BTU/yr,}$$

to result in a cumulative program savings of

$$99.6 \times 10^{12} \text{ BTU/yr.}$$

Reported actual savings are below this objective for the year. The current economic plight of industry in the U.S. has served to reduce the rate of implementation of energy conservation equipment. Profits at many firms have been down for so long that any gains have been used to pay off debts and to make investments essential to plant maintenance. An upturn in the economy should hopefully bring a return of the energy conservation results of years past.

Respectfully submitted,

Hank Jackson
Project Director

mro

Attachments

TABLE 1 -- IEES ENERGY SAVINGS ESTIMATE
10/1/82 - 12/31/82 (Fourth Quarter 1982)

Actual Annual Savings (10^9 BTU's)

<u>Industry Group</u>	<u>Audits</u>	<u>Workshops</u>	<u>Expanded Workshop Savings</u>	<u>Total</u>
General*	1.92	18.025	424.975	44.92
Textiles	0.0	-	-	-
Chemical	0.0	17.28	407.411	424.691
Stone, Clay & Glass	<u>151.1</u>	<u>11.42</u>	<u>269.249</u>	<u>431.769</u>
	153.02	46.725	1101.635	1301.38

*General industry sector now includes food and kindred products.

TABLE 2 -- IEES ENERGY SAVINGS ESTIMATE

10/1/82 to 12/31/82

Actual Annual Savings (10^9 BTU's)

<u>Industry Group</u>	<u>Estimate through 3rd Quarter 1982¹</u>	<u>Estimate for 4th Quarter 1982²</u>	<u>Cumulative Estimate through 4th Quarter 1982</u>
General	19,330.18	444.92	19,775.1
Textile	18,157.20	0.0	18,157.20
Chemical	29,669.54	424.691	30,094.231
Stone, Clay & Glass	<u>25,037.23</u>	<u>431.769</u>	<u>25,468.999</u>
TOTALS	91,858.50	1301.38	93,495.53

¹Reported in October memorandum from G. Thomas to H. Jackson

²Shown in Table 1 of this report.

STATE OF GEORGIA
INDUSTRIAL ENERGY EXTENSION SERVICE
Program Highlights 8/1/77 - 12/31/82

● Total Industry Contacts	1,431
● Plant Visits	697
● Audits Completed*	301
● Workshops Conducted	56
● Total Workshop Attendees	1,843
● Estimated Actual Energy Savings by Georgia Industry During Program Existence	93.5 trillion BTU's
● Estimated Actual Energy Cost Savings by Georgia Industry During Program Existence	\$310.1 million

*Includes in-plant technical assistance activity which is defined as work in a specific energy conservation area which culminates in a written report to company management.

LIBRARY DOES NOT HAVE

Quarterly Progress Report, January 1983 through March 1983



ENGINEERING EXPERIMENT STATION
Georgia Institute of Technology
A Unit of the University System of Georgia
Atlanta, Georgia 30332

July 20, 1983

Mr. Phil Whitlow
Georgia Office of Energy Resources
Trinity-Washington Building
270 Washington Street
Atlanta, Georgia 30334

Subject: Industrial Energy Extension Service Program Quarterly
Progress Summary Report for EES/GIT Research Project
A3289 for Period April 1, 1983 to June 30, 1983

Dear Mr. Whitlow:

This report summarizes activities on Research Project A3289, for the Second Quarter, 1983.

Quarterly Goals

1. Continue energy audit and technical assistance program for industry; complete last of 60 in-plant energy management surveys and furnish reports to management.
2. Develop and publish last five technical briefing reports on important energy technology areas.
3. Print and mail second quarter issue of the Conserver.
4. Conduct three workshops in Atlanta: Creative Financing for Energy Conservation Equipment, Boiler Efficiency Improvement, and Energy Measurement Techniques.
5. Continue program promotion, follow-up, and evaluation.

Quarterly Activities

1. Statistics for in-plant activity:

	<u>Quarter</u>	<u>1982-83 Cumulative</u>	<u>1982-83 Program Goals</u>
Total Industry Contacts:	142	299	N/A
New Industry Contacts:	10	103	100
Plant Visits:	12	74	N/A
New Audit/TA Plants:	11	60	60
Unsolicited Requests:	7	27	N/A
Reports Sent:	32	65	N/A
Case Studies:	0	2	16
Completed TA's*:	7	14	
Completed Audits:	25 } 32	51 } 65	60

*In-plant activity in a specific energy conservation area which culminates in a written report to company management.

2. The second quarter issue of the Conserver was mailed to 6,500 business and industry representatives as well to EES extension offices and Georgia State Legislators. A copy is attached.
3. Presented Creative Financing Workshop on April 20 in Atlanta, and two back-to-back workshops, Boiler Efficiency Improvement and Energy Measurement, on May 19-20 in Atlanta.
4. Updated mailing list with changes, additions, and deletions.
5. Delivered a talk on the IEES program at the Joint Convention of the Georgia and Florida Meatpackers Associations held at Ponte Vedra Beach, Florida, and received a very enthusiastic response.
6. Five more technical briefing reports published:
 - "Solid State Motor Controls"
 - "Computer Based Energy Management"
 - "Coal Technologies for Georgia Industries"
 - "High Pressure Nozzles"
 - "Direct Digital Control"

Copies are attached.

Mr. Phil Whitlow
July 20, 1983
Page Three

Milestones Met During the Quarter

1. Evaluated results of IEES program through the second quarter of 1983 (see attachments). Estimated program energy savings by Georgia industries for the second quarter of 1983 was:

$$11.2 \times 10^9 \text{ Btu/yr}$$

This gives a cumulative total program savings in excess of

$$93.7 \times 10^{12} \text{ Btu/yr}$$

for a cost savings of over \$310 million/year. The energy savings goal for this year is

$$8.0 \times 10^{12} \text{ Btu/yr}$$

to result in a cumulative program savings of

$$99.6 \times 10^{12} \text{ Btu/yr.}$$

Respectfully submitted,

Hank Jackson *U*
Project Director

mro

Attachments

TABLE 1 -- IEES ENERGY SAVINGS ESTIMATE

4/1/83 - 6/30/83 (Second Quarter 1983)

Actual Annual Savings (10^9 Btu's)

<u>Industry Group</u>	<u>Audits</u>	<u>Workshops</u>	<u>Expanded Workshop Savings</u>	<u>Total</u>
General	11.2	0.0	-	11.2
Textiles	0.0	0.0	-	0.0
Chemicals	0.0	0.0	-	0.0
Stone, Clay & Glass	<u>0.0</u>	<u>0.0</u>	-	<u>0.0</u>
	11.2	0.0		11.2

TABLE 2 -- IEES ENERGY SAVINGS ESTIMATE

8/1/77 to 6/30/83

Actual Annual Savings (10^9 Btu's)

<u>Industry Group</u>	<u>Estimate through 1st Quarter 1983¹</u>	<u>Estimate for 2nd Quarter 1983²</u>	<u>Cumulative Estimate through 1st Quarter 1983</u>
General	19,780	11.2	19,791
Textile	18,170	0.0	18,170
Chemical	30,094	0.0	30,094
Stone, Clay & Glass	<u>25,679</u>	<u>0.0</u>	<u>25,679</u>
Totals	93,723	11.2	93,734

¹Reported by group coordinators in April memorandum to H. Jackson.

²Shown in Table 1 of this report.

STATE OF GEORGIA
INDUSTRIAL ENERGY EXTENSION SERVICE

Program Highlights-8/1/77 - 6/30/83

● Total Industry Contacts	1,624
● Plant Visits	742
● Audits Completed*	344
● Workshops Conducted	60
● Total Workshop Attendees	1,941
● Estimated Actual Energy Savings by Georgia Industry During Program Existence	93.7 trillion Btu's
● Estimated Actual Energy Cost Savings by Georgia Industry During Program Existence	+ \$310.1 million

*Includes in-plant technical assistance activity which is defined as work in a specific energy conservation area which culminates in a written report to company management.